IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

PATENT APPLICATION

#10

Applicants: **Rick W. LANDSMAN, Wei-Yeh LEE**

Case: **UCC-1/CIP**

Serial No.: **09/237,718** Filed: **January 26, 1999**

Group Art Unit: **2765**

Examiner:

Title: **A TECHNIQUE FOR IMPLEMENTING BROWSER-INITIATED USER-TRANSPARENT NETWORK-DISTRIBUTED INTERSTITIAL WEB ADVERTISING THROUGH USE OF AN ADVERTISING TAG EMBEDDED IN A REFERRING WEB PAGE** (as amended)

COMMISSIONER FOR PATENTS
Washington, D. C. 20231

S I R:

PETITION TO MAKE SPECIAL
UNDER M.P.E.P § 708.02(VIII)

The Applicants respectfully petition the Commissioner to make the above-identified application, which has not yet been examined, "Special" under the provisions of M.P.E.P. 708.02(VIII) such that its examination may be expedited to the fullest extent possible.

As a basis for granting the petition, the Applicants set forth the following facts and circumstances:

Reasons under M.P.E.P. 708.02 (VIII) - New Applications

This application, as it presently stands, contains 104 claims (formed of 3 independent claims and 101 dependent claims) all directed to a single invention.

I. Present Invention

Not only is this petition being filed to make the present application "Special", but also a similar corresponding petition is being filed simultaneously herewith in each of two of the Applicants' other co-pending applications as well. These applications are serial number 09/237,718 filed January 26, 1999 (the present application), and its two divisional applications: serial numbers 09/352,623 and 09/352,398 both of the latter filed on July 13, 1999 (all henceforth collectively referred to herein as the "Applicants' three co-pending applications"). Since all these applications claim different patentably distinct aspects of the same technical subject matter, the Applicants will first discuss their inventive technology encompassed by all three applications prior to identifying the specific subject matter claimed in each.

A. Overview of inventive subject matter

The applications are generally directed at interstitial display of information objects, such as advertisements, where those objects are "politely" downloaded from remote servers and subsequently rendered during interstitial intervals while a user transitions between successive web pages.

Within that ambit, a tag, illustratively an advertising tag, embedded within a web content page (also

hereinafter referred to as a "referring" web page) completely "de-couples" an information object, such as, e.g., advertising content, from that page, where, as a result of the tag being executed as a browser, executing at a client computer, interprets the page, the client computer:

(a) downloads at least one file needed to render that object; and

(b) when a user-initiated event, such as a mouse click or other page navigation event, occurs which signifies that a user has instructed the browser to transition from the referring web page to a next successive web page, hence starting an interstitial interval, suspends further downloading and processes the file previously downloaded in order to interstitially render the object.

B. Specific discussion of inventive subject matter in the Applicants' three co-pending divisional applications

i. Technical description common to the applications

To facilitate reader understanding, the Applicants will describe specifics of their inventive subject matter rather than in a general context of downloading and rendering "information objects" (as is claimed), but instead in a specific context, in accordance with their preferred embodiment, where those objects are advertisements.

From an implementational standpoint, an HTML tag (here an "advertising tag") is embedded into the referring web page. This tag contains two components. One component effectively downloads, from a distribution HTTP (web) server and to an extent necessary, and then persistently instantiates an agent, implemented as a "light-weight" Java applet, at the client browser. This agent, once

instantiated, then "politely" and transparently downloads, e.g., advertising files (media, and, where necessary, player files), originating from an ad management system residing on a third-party advertising HTTP (web) server, for a given advertisement into browser disk cache (also in the case of media files into the browser RAM cache) and subsequently plays those media files through the browser on an interstitial basis and in response to a user click-stream. The other component of the tag is a reference, in terms of a web address, of the advertising management system from which the advertising files are to be downloaded. This latter reference totally "de-couples" advertising content from a web page such that a web page, rather than embedding actual advertising content within the page itself, as conventionally occurs, merely includes an advertising tag that refers, via a URL, to a specific ad management system rather than to a particular advertisement or its content. The ad management system selects the given advertisement that is to be downloaded, rather than having that selection or its content being embedded in the web content page.

Advantageously, the agent operates independently, in the client browser, of the content in any referring web page. Once loaded and started, the agent executes in parallel, with standard browser functionality, continually and transparently requesting and downloading, e.g., advertisements to browser cache residing in a client computer (e.g., personal computer -- PC) and interstitially playing those advertisements.

In particular, once the agent is started, the agent politely and transparently downloads, through the client browser and to the browser cache, both media and

player files, originating from the advertisement management server, for an advertisement that are needed to fully play content in that advertisement. The agent also monitors a click-stream generated by a user who then operates the browser. In response to a user-initiated action, e.g., a mouse click, which instructs the client browser to transition to a next successive content web page and which signifies a start of an interstitial interval, the agent, if all the media and player files are then resident on the client hard disk, plays the media files, through the browser and during that interstitial interval, directly from the browser cache. Advertisements are interstitially played typically in the order in which they were downloaded to the client browser. Interstitial play from browser cache advantageously permits previously cached content rich advertisements to be played through the browser without adversely affecting communication link bandwidth then available to the client browser. Thus, the full available link bandwidth can be used, while an advertisement is being played, to download a next successive content web page.

Employing a user click-stream to trigger play of cached advertisements frees the user, for receiving advertising, of any need either to undertake any affirmative action, other than normal web browsing, or to learn any new procedure; thus, advantageously imposing no added burden on the user.

Advantageously, the agent "politely" downloads advertisement media and player files, originating from the advertising server, to the browser cache, during what otherwise would be browser idle times, i.e., while a web page is being displayed to a user and the browser is waiting

for user input. Caching advertisement files in this fashion advantageously circumvents variable latency and erratic (e.g., intermittent or suspended) play that frequently occurs with conventional streamed and static media delivered over the web.

At the start of an interstitial interval, the agent determines whether all the media and player files required to play a given advertisement (typically that having its so-called "AdDescriptor" file situated at a head of a play queue) then reside on the disk of the client PC or, with respect to media files, are resident in browser RAM cache. If so, the agent then accesses these files from the disk to "play" that advertisement. Since all the media and player files are then locally resident, the advertisement, from a user's perspective, is immediately rendered from the client hard disk or browser RAM cache with essentially no downloading delay, thus providing a highly pleasing "user experience" with rich multi-media content approaching that obtainable through current CD-ROM based delivery. Thereafter, the agent returns control to the browser to permit the browser, if a next successive web page has been downloaded, assembled and ready to be rendered, to render that particular page to the user. If, however, an advertisement is prematurely terminated by a user, that advertisement (in terms of its AdDescriptor file) will remain in a play queue (with its media and player files remaining on the client hard disk or, in the case of media files, in browser RAM cache) and will be re-played from its beginning at the start of a next successive interstitial interval. Furthermore, if download of the media and player files for an advertisement were to be interrupted by a user click-stream, i.e., start of interstitial interval, the

agent suspends further downloading until after the ensuing interstitial interval terminates. To conserve communication link bandwidth, the agent then resumes downloading of these files at a point it was suspended, rather than, as conventionally occurs, totally re-starting the download.

Specifically, the agent contains two applets: a Transition Sensor applet and an "AdController" applet. Only the Transition Sensor applet is itself associated with any content page. Though the AdController applet, once started, executes under the browser, it is not under the control of the browser itself.

As discussed above, the advertising tag is itself embedded in a content web page. The advertising tag, as one of its components, references a JavaScript file (which contains a "script") stored on a distribution server. The JavaScript file, when executed, downloads and implements, through dynamic writing of applet tags, the Transition Sensor applet, which, once executing and in turn, loads, instantiates and starts the AdController applet. The Transition Sensor applet remains visually transparent to a user who displays, with his(her) browser, the HTML coding for that page. In particular, when the JavaScript file is downloaded and the script it contains is then executed by the browser, the script dynamically writes a predefined number and combination of applet tags, i.e., which collectively form the Transition Sensor applet, into the retrieved web page content in lieu of the advertising tag. Subsequent execution of these tags, by the client browser, invokes the Transition Sensor applet. As discussed, the advertising tag, as the other one of its components, also encapsulates a reference, i.e., a URL to a specific ad

management server, typically sited on a third party advertising server, containing specific media, that collectively constitutes web advertisements, and accompanying player files.

ii. Claimed invention in present application

The present application, i.e., serial number 09/237,718, as it currently stands amended, contains claims directed to the use of the embedded tag, illustratively an advertising tag, to de-couple content of an information object, e.g., advertising, from the content of the referring web page and, in response to execution of the tag, politely download that content and subsequently render that content on an interstitial basis.

iii. Claimed invention in Applicants' 09/352,623 divisional application

The 09/352,623 co-pending divisional application (filed July 13, 1999), as it stands amended, contains claims directed to executing code in a referring web page, where that code, illustratively an advertising tag, once executed by a client computer, causes the client computer to download the agent and then, through execution of the agent, download the information object and then, in response to a user initiated event, that triggers an ensuing interstitial interval for transitioning between web pages, play a then downloaded information object during that interval.

iv. Claimed invention in Applicants' 09/352,398 divisional application

The 09/352,398 co-pending divisional application (also filed July 13, 1999), as it stands amended, contains claims directed to executing code, illustratively an advertising tag, in a referring web page, where that code, once executed by a browser in a client computer, causes the client computer to download the agent and then, through execution of the agent, monitor a user click-stream to detect a user navigation event and thus signify a transition from one web page to a next and hence the start of an interstitial interval and, in response to that event, suspend further downloading and process a downloaded object so as to interstitially render that object to the user.

II. Restriction

If the Examiner concludes, for whatever reason, that all the pending claims in the present application are not directed to the single invention discussed above, then, as a pre-requisite for the Office granting this petition, the Applicants will make an election, without traverse, to the claims directed to this specific invention.

III. Pre-examination searches and Applicants' previous disclosures of art

A. Parent Patent Research (PPR) Search

A pre-examination novelty and patentability search was made by a professional patent search firm, namely Parent Patent Research, Inc. of Alexandria, Virginia. The purpose

of this search was to locate art relevant to any of the three separately claimed inventions set forth above.

i. Field of search undertaken by PPR

During the course of this search, the following classes and sub-classes were examined and the following references were located, as reported in a letter dated December 21, 1999 from PPR to the undersigned attorney.

Classes searched	Sub-classes searched
235	375
705	1, 10, 14, 26, 27
707	512, 513
709	218, 219

In addition, as PPR reported, to locate additional art, the searcher also performed a key word search through the "WEST" computer system available at the US Patent and Trademark Office, using the US PTO, Japanese Patent Office and EP/WO databases, using the following keywords: "advertisement", "internet", "browser", "web", and "tag".

ii. References uncovered by PPR search

United States Patents:

Patent No.	Inventor(s)	Class	Date Issued
5,999,912	Wodarz et al	705/14	December 7, 1999
5,996,007	Klug et al	709/218	November 30, 1999
5,991,799	Yen et al	709/218	November 23, 1999
5,987,466	Greer et al	707/10	November 16, 1999
5,983,268	Freivald et al	709/218	November 9, 1999

5,983,244	Nation	707/501	November 9, 1999
5,978,842	Noble et al	709/218	November 2, 1999
5,978,841	Berger	709/217	November 2, 1999
5,963,909	Warren et al	705/1	October 5, 1999
5,961,602	Thompson et al	709/229	October 5, 1999
5,960,409	Wexler	705/14	September 28, 1999
5,948,061	Merriman et al	709/219	September 7, 1999
5,946,697	Shen	707/104	August 31, 1999
5,946,664	Ebisawa	705/14	August 31, 1999
5,937,392	Alberts	705/14	August 10, 1999
5,937,390	Hyodo	705/14	August 10, 1999
5,933,811	Angles et al	705/14	August 3, 1999
5,931,907	Davies et al	709/218	August 3, 1999
5,923,853	Danneels	395/200.68	July 13, 1999
5,918,214	Perkowski	705/27	June 29, 1999
5,918,012	Astiz et al	395/200.47	June 29, 1999
5,897,622	Blinn et al	705/26	April 27, 1999
5,870,769	Freund	707/501	February 9, 1999
5,864,823	Levitan	105/14	January 26, 1999
5,809,481	Baron et al	705/14	September 15, 1998
5,737,739	Shirley et al	707/512	April 7, 1998
5,717,860	Graber et al	395/200.12	February 10, 1998
5,710,918	Lagarde et al	395/610	January 20, 1998
5,701,451	Rogers et al	395/600	December 23, 1997
5,515,270	Weinblatt	364/405	May 7, 1996

Japanese Published Patent Applications:

Publication No.	Date Published
JP 11-154159	June 8, 1999
JP 11-003072	January 6, 1999
JP 10-312344	November 24, 1998

European Published Patent Application:

Publication No.	Date Published
EP 0 822 535 A2	February 4, 1998

B. Additional searching performed by Applicants' Attorney

In addition, over the past few months, the undersigned attorney significantly expanded the PPR search by:

(a) reviewing references cited in various patents uncovered in the PPR search in an effort to define various search "threads", for additional investigation, in an effort to locate further relevant, but earlier, prior art patent references; and

(b) reviewing patent references in each search "thread"; and iteratively defining additional search threads given the results of existing search threads, and reviewing patent references in each such additional thread until all such threads were investigated and exhausted.

Furthermore, also over the past few months, the Applicants' attorney conducted, though for a different matter than the Applicant's three co-pending applications, various targeted manual searches and a computerized literature and patent search, through databases available from The Dialog Corporation, to locate prior art, published during the 1969-1996 timeframe, relevant to the general topic of interstitial Internet advertising. The computerized search, performed on June 11, 2000, employed the following keywords, in the combinations shown: ("advertising" or "advertisement" or "ad") and ("interstitial" or "delay" or "idle") and ("network" or "internet").

As a result of all this search activity, the following additional art was uncovered:

United States Patents:

Patent No.	Inventor(s)	Class	Date Issued
6,014,698	Griffiths	709/224	January 11, 2000
6,011,537	Slotznick	345/115	January 4, 2000
6,009,410	LeMole et al	705/14	December 28, 1999
5,946,646	Schena et al	702/177	August 31, 1999
5,913,040	Rakavy et al	395/200.62	June 15, 1999
5,854,897	Radziewicz et al	395/200.54	December 29, 1998
5,838,458	Tsai	358/402	November 17, 1998
5,809,242	Shaw et al	395/200.47	September 15, 1998
5,805,815	Hill	395/200.48	September 8, 1998
5,794,210	Goldhaber et al	705/14	August 11, 1998
5,787,254	Maddalozzo, Jr. et al	395/200.58	July 28, 1998
5,781,894	Petrecca et al	705/14	July 14, 1998
5,768,508	Eikeland	395/200.32	June 16, 1998
5,761,601	Nemirofsky et al	455/3.1	June 2, 1998
5,724,521	Dedrick	395/226	March 3, 1998
5,721,827	Logan et al	395/200.47	February 24, 1998
5,664,948	Dimitriadis et al	434/307 R	September 9, 1997
5,657,450	Rao et al	395/610	August 12, 1997
5,635,979	Kostreski et al	348/13	June 3, 1997
5,630,081	Rybicki et al	395/348	May 13, 1997
5,629,978	Blumhardt et al	379/201	May 13, 1997
5,621,456	Florin et al	348/7	April 15, 1997
5,615,131	Mortensen et al	364/514 A	March 25, 1997
5,606,359	Youden et al	348/7	February 25, 1997

5,602,905	Mettke	379/96	February 11, 1997
5,596,718	Boebert et al	395/187.01	January 21, 1997
5,594,779	Goodman	379/59	January 14, 1997
5,594,509	Florin et al	348/731	January 14, 1997
5,590,046	Anderson et al	364/474.13	December 31, 1996
5,583,560	Florin et al	348/7	December 10, 1996
5,579,381	Courville et al	379/201	November 26, 1996
5,564,043	Siefert	395/600	October 8, 1996
5,563,804	Mortensen et al	364/514 A	October 8, 1996
5,541,986	Hou	379/201	July 30, 1996
5,532,735	Blahut et al	348/13	July 2, 1996
5,530,472	Bregman et al	348/15	June 25, 1996
5,524,197	Uya et al	395/157	June 4, 1996
5,524,195	Clanton, III et al	395/155	June 4, 1996
5,515,098	Carles	348/8	May 7, 1996
5,491,785	Robson et al	395/162	February 13, 1996
5,483,466	Kawahara et al	364/514 C	January 9, 1996
5,442,771	Filepp et al	395/650	August 15, 1995
5,438,518	Bianco et al	364/460	August 1, 1995
5,418,549	Anderson et al	345/145	May 23, 1995
5,412,720	Hoarty	380/15	May 2, 1995
5,392,447	Schlack et al	395/800	February 21, 1995
5,361,393	Rossillo	395/650	November 1, 1994
5,361,199	Shoquist et al	364/401	November 1, 1994
5,361,091	Hoarty et al	348/7	November 1, 1994
5,355,501	Gross et al	395/750	October 11, 1994
5,355,472	Lewis	395/600	October 11, 1994
5,347,632	Filepp et al	395/200	September 13, 1994
5,333,237	Stefanopoulous et al	395/12	July 26, 1994
5,327,554	Palazzi et al	395/600	July 5, 1994

5,325,483	Ise et al	395/162	June 28, 1994
5,325,423	Lewis	379/90	June 28, 1994
5,321,740	Gregorek et al	379/96	June 14, 1994
5,319,455	Hoarty et al	348/7	June 7, 1994
5,313,455	van der Wal et al	370/13	May 17, 1994
5,307,456	MacKay	395/154	April 26, 1994
5,297,249	Bernstein et al	395/156	March 22, 1994
5,285,442	Iwamura et al	370/17	February 8, 1994
5,283,731	Lalonde et al	364/401	February 1, 1994
5,283,639	Esch et al	348/6	February 1, 1994
5,268,963	Monroe et al	380/23	December 7, 1993
5,253,341	Rozmanith et al	395/200	October 12, 1993
5,220,564	Tuch et al	370/94.1	June 15, 1993
5,220,516	Dodson et al	364/514	June 15, 1993
5,220,420	Hoarty et al	358/86	June 15, 1993
5,165,012	Crandall et al	395/100	November 17, 1992
5,159,669	Trigg et al	395/159	October 27, 1992
5,105,184	Pirani et al	340/721	April 14, 1992
5,099,420	Barlow et al	395/325	March 24, 1992
5,093,718	Hoarty et al	358/84	March 3, 1992
5,029,104	Dodson et al	364/514	July 2, 1991
5,027,400	Baji et al	380/20	June 25, 1991
4,850,007	Marino et al	379/67	July 7, 1989
4,799,146	Chauvel	364/200	January 17, 1989
4,775,935	Yourick	364/401	October 4, 1988
4,719,567	Whittington et al	364/200	January 12, 1988
4,575,579	Simon et al	178/4	March 11, 1986

PCT Published Patent Applications:

Publication No.	Date Published
WO 99/09486	February 25, 1999
WO 98/25198	June 11, 1998
WO 96/30864	October 3, 1996

European Published Patent Application:

Publication No.	Date Published
EP 0 903 903 A2	March 24, 1999

Japanese Published Patent Application:

Publication No.	Date Published
JP 9-114781	May 2, 1997

Korean Published Patent Application:

Publication No.	Date Published
KR 97-078058	December 12, 1997

Publications:

C. Taylor, "Going Beyond the Banner", Adweek Marketing Week (now Brandweek), Interactive Quarterly Section, July 8, 1996, pages 22 et seq (downloaded as six pages, specifically pages 36-41).

J. Hodges, "Marketers play web games as serious biz", Advertising Age, Interactive Media and Marketing section, March 14, 1996, one page.

C. International search performed for Applicants' PCT counterpart application

In addition to the search activity described above, an International (PCT) search has also been issued by the International Searching Authority/EP (ISA/EP) with respect to application WO 99/60504 (international application number PCT/US99/10707). This PCT application is a counterpart to the Applicants' pending 09/237,718 application but with an earlier version of the claim than that which presently exists, as claim 2, in the latter application. The references, which have been uncovered by the International search, are as follows:

European Published Patent Application:

Publication No.	Date Published
EP 0 818 742 A1	January 14, 1998

PCT Published Patent Application:

Publication No.	Date Published
WO 97/21183	June 12, 1997

Publication:

Y. Kohda et al, "Ubiquitous Advertising on the WWW: Merging Advertisement on the Browser", Computer Networks and ISDN Systems, Vol. 28, published by Elsevier Science B.V., 1996, pp. 1493-1499.

All these references noted in this section, along with a copy of the International Search Results, have been previously cited by the Applicants in a Supplemental

Disclosure Statement filed October 25, 1999 in the present application.

D. References previously cited by the Applicants through an Information Disclosure Statement filed March 22, 1999

Furthermore, apart from the PCT search and as the Examiner will see from the file of this application, the Applicants have previously cited various references to the Examiner on March 22, 1999. These particular references are as follows:

United States Patents:

Patent No.	Inventor(s)	Class	Date Issued
5,796,952	Davis et al	395/200.54	August 18, 1998
5,754,830	Butts et al	395/500	May 19, 1998
5,742,768	Gennaro et al	295/200.33	April 21, 1998
5,740,549	Reilly et al	705/14	April 14, 1998
5,737,619	Judson	395/761	April 7, 1998
5,706,502	Foley et al	395/610	January 6, 1998
5,572,643	Judson	395/793	November 5, 1996
5,548,745	Egan et al	395/500	August 20, 1996
5,515,490	Buchanan et al	395/154	May 7, 1996
5,367,621	Cohen et al	395/154	November 22, 1994
5,305,195	Murphy	364/401	April 19, 1994

PCT Published Patent Application:

*Publication No.	Date Published
WO 97/07656	March 6, 1997

Publications and Textbooks:

"Web Ads Start to Click", Business Week, 6 October 1997, pages 128, 130-132, 134 and 138.

P. van der Linden, Just Java 1.2 - Fourth Edition, (© 1999, Sun Microsystems, Inc.), specifically Chapter 13, "All About Applets", pages 322-346.

A complete copy of each of the references listed in sections A-D above, is enclosed herewith, unless that reference has been previously submitted by the Applicant in which case, to eliminate unnecessary duplication, a copy of that reference is intentionally omitted. The Rakavy 5,913,040 patent is a US counterpart to the WO 97/07656 application -- which has already been cited, and as such a copy of this US patent is also omitted.

In addition, the Applicants have also enclosed a Second Supplemental Information Disclosure Statement, including an accompanying PTO-1449 form, which lists all the references being submitted herewith.

IV. Identification and discussion of the most relevant references

After having examined all of these references, including all those previously cited as well as those being cited herein, the Applicant's attorney has concluded that the present invention, as defined by the claims appearing in the present application, is patentably distinguishable over the teachings of all these references.

A. Identification

Of all the above-listed references uncovered to date, the Applicants' attorney believes that the most relevant references, to the invention claimed in the present application, are as follows. Similarly, these very same references are also those that the attorney believes are most relevant to the invention now claimed in each of the other two of the Applicants' three co-pending applications as well.

United States Patents:

No.	Patent No.	Inventor(s)	Class	Date Issued
1	6,011,537	Slotznick	345/115	January 4, 2000
2	5,999,912	Wodarz et al	705/14	December 7, 1999
3	5,996,007	Klug et al	709/218	November 30, 1999
4	5,946,646	Schena et al	702/177	August 31, 1999
5	5,933,811	Angles et al	705/14	August 3, 1999
6	5,854,897	Radziewicz et al	395/200.54	December 29, 1998
7	5,805,815	Hill	395/200.48	September 8, 1998
8	5,781,894	Petrecca et al	705/14	July 14, 1998
9	5,742,768	Gennaro et al	295/200.33	April 21, 1998
10	5,740,549	Reilly et al	705/14	April 14, 1998
11	5,737,619	Judson	395/761	April 7, 1998
12	5,572,643	Judson	395/793	November 5, 1996
13	5,548,745	Egan et al	395/500	August 20, 1996
14	5,305,195	Murphy	364/401	April 19, 1994

International and Foreign Published Patent Applications:

No.	Publication No.	Date Published
15	WO 99/09486	February 25, 1999
16	WO 97/21183	June 12, 1997

17	WO 97/07656	March 6, 1997
18	WO 96/30864	October 3, 1996
19	EP 0 903 903 A2	March 24, 1999
20	EP 0 818 742 A1	January 14, 1998

Publication:

21. Y. Kohda et al, "Ubiquitous Advertising on the WWW: Merging Advertisement on the Browser", Computer Networks and ISDN Systems, Vol. 28, published by Elsevier Science B.V., 1996, pp. 1493-1499.

B. Discussion

The '537 Slotznick patent (Reference 1) describes a system for distributing advertisements over the Internet to client computers and interstitially displaying those advertisements thereat. Through this system and during an interstitial interval, an advertisement (encompassed by a term referred to in this patent as "secondary information") may be displayed separately from a web page (referred to in this patent as "primary information") that immediately preceded that interval, or a portion of that advertisement, such as a thumbnail, keyhole or banner image, may be displayed simultaneously with that page. The advertisement and the web page are downloaded by the browser from corresponding servers and locally stored in the client, where the advertisements are downloaded in background while a web page is being displayed to a user. While this reference discloses the concept of interstitial display, it fails to disclose the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

The '912 Wodarz et al patent (Reference 2) describes a methodology for use in displaying Internet-distributed advertisements. As described, a tag is embedded in a web page. The tag specifies a particular advertisement that is to be displayed at a position of that tag in the page and also defines characteristics of that advertisement. In operation, a request issued by a client browser to fetch a page is sent to a server-resident parser. The parser accesses a template for the requested page and then provides conventional HTML coding for that page back to the client browser. The parser also expands the tag to determine, inter alia, a type of advertisement that can be inserted into the page, and which advertisements, based on that type, are valid for that tag. The parser then selects, from a list of valid advertisements, a particular advertisement, i.e., one that satisfies parameters set forth in the tag, and generates HTML code which links that particular advertisement to the tag. This code is then sent to the client browser which accesses the advertisement and then inserts it into the displayed page at a position given by the tag. This reference contains no disclosure of interstitial display. In addition, this reference fails to disclose the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

The '007 Klug et al patent (reference 3) describes a methodology of distributing content over the Internet to client computers. Here, a message set, specifically a set of advertisements, for a user is selected in response to stored user information, e.g., a profile, and then downloaded to a corresponding client computer and locally

stored thereat. Subsequently, during an interstitial interval, the client computer selects a particular advertisement from the downloaded set and then displays that advertisement for the remainder of that interval. The set of advertisements can be downloaded and locally stored in a client computer prior to an Internet session during which advertisements in that set will be displayed or, through either an explicit or background function provided by a browser, during that Internet session. The particular advertisement(s) to be displayed during any one interstitial interval can be selected based on an anticipated duration of that interval. While this reference discloses the concept of interstitial display, it too fails to disclose the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

The '646 Schena et al patent (Reference 4), as well as the WO 96/30864 PCT patent application (Reference 18), discloses a system for distributing advertisements over the Internet to client computers (workstations). Here, during periods of client inactivity, advertisements are downloaded from a remote advertisement server and locally stored at the client. Downloaded advertisements are subsequently displayed whenever the keyboard at the client is inactive for a specified period of time, i.e., effectively using a "screen saver" approach during client idle times. Neither of these references contains any disclosure of interstitial display. In addition, both of these references also fail to disclose the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

The '811 Angles et al patent (Reference 5) describes a system for distributing customized banner advertisements over the Internet to client computers. Here, an advertisement request, which is an HTML tag that references a URL of an ad provider computer, is embedded within a web page. When that request is executed by a client browser, the client computer establishes a link to the ad provider computer and causes a content provider script to execute at that latter computer. Using a consumer (user) code stored on the client computer and provided thereby, the ad provider computer accesses a profile of the user and selects a particular advertisement to download to the client computer. Upon receipt of this advertisement, the browser executing at the client computer merges (inserts) this advertisement into content, such as a page, then being provided by a content provider and subsequently renders the resulting merged content, containing the banner advertisement, to the user. As the Examiner can appreciate, this approach, relying on banner advertisements, does not utilize interstitial display. Furthermore, this reference also fails to disclose the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

The '897 Radziewicz et al patent (Reference 6) describes an Internet-based advertisement distribution system in which advertisements are transmitted to a client computer when a network communication path to that client is idle. A central announcement server selects a type of advertisements that are to be downloaded to the client computer. The advertisements are displayed, at the client computer, in predefined locations of a browser window and

for a predetermined time period. This reference also contains no disclosure of interstitial display. Furthermore, this reference also fails to disclose the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

The '815 Hill patent (Reference 7) describes a system for distributing advertisements over the Internet wherein advertising content is contained within a so-called "content laden" link in a web page. Specifically, a content laden link is downloaded with a web page and locally cached in a client computer. The content is not displayed with the link. Whenever a user, through an executing client browser, clicks on such a link to fetch a next successive web page, then, during an ensuing interstitial interval while the browser transitions to and downloads that page, the browser accesses the content associated with that particular link from local storage and renders that content to a user. While this reference does disclose the concept of interstitial display, it too fails to disclose the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

The '894 Petrecca et al patent (Reference 8) describes a system for distributing advertising where advertisements are downloaded to a client computer, through a network connection, from a remote server during those times when that connection is idle, and for subsequently rendering those advertisements to a user. As each advertisement is downloaded, it is locally stored on the client computer for subsequent access and rendering during

user "waiting times" (waiting periods), i.e., those times when the computer is not able to accept input information from a user. Here, the system, in an improvement over the system taught in the '195 Murphy patent (Reference 14) which is discussed below, estimates the length of each waiting period and selects an advertisement which, when rendered, will temporally fit into that period. Alternatively, this system can also render advertisements through a "screen saver" approach, i.e., during client idle times. While this reference also discloses the concept of interstitial display, it fails to disclose the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

The '768 Gennaro patent (Reference 9) discloses the concept of downloading an applet from a remote server to a client computer for local execution under a browser executing at the client computer. Similarly, the '745 Egan patent (Reference 13) describes the concept of downloading applets from a remote server to a local machine for local storage and execution at the latter. Neither of these references contains any disclosure of interstitial display. Furthermore, both of these references fail to disclose the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

The '549 Reilly et al patent (reference 10) describes a system for distributing advertisements, over the Internet, to client computers and subsequently accessing and rendering the ads not on an interstitial basis but rather through a "screen saver" approach. Advertisement files are

"pushed" to the client computer by a remote server and stored locally at the client computer during those times when the client computer is expected to be idle and particularly during long periods of expected user inactivity, e.g., middle of each night. This reference does not contain any disclosure of interstitial display. Furthermore, this reference fails to disclose the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

The '643 Judson patent (Reference 12) describes a system for distributing advertisements over the Internet from remote servers to client computers and for interstitially displaying those advertisements. Here, an advertisement is embedded, typically delimited by HTML comment tags, within a web page downloaded from a remote server to a client computer and locally stored at the latter. During an interstitial interval, while a client browser fetches a next successive web page from an associated server, the browser accesses the object from local storage and renders the advertisement. The '619 Judson patent (Reference 11), which resulted from a continuation-in-part of the application for the '643 Judson patent, additionally teaches the concept of storing advertisement objects, in a central repository (server), totally separate from web pages. Specifically, in response to a request from a client browser executing in a client computer to fetch ("pull") a web page from a web server, that page is downloaded to the client browser and also an advertisement object is "pushed" (i.e., with no request being issued therefor by the client browser) from the central repository to that browser. Both the page and

advertisement object are then locally stored at the client, with the browser then rendering the page. During an ensuing interstitial interval, while the browser fetches a next successive web page from an associated web server, the browser accesses the "pushed" advertisement object from local storage and renders the advertisement. While both of these references disclose the concept of interstitial advertising, in the context of Internet-distributed advertisements, neither of these references discloses the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

The '195 Murphy patent (Reference 14) describes a system for downloading advertisements from a remote server (referred to as a "commercial computer") to a client automated teller machine (ATM) during intervals of low utilization of a network connection, through an ATM (not Internet) network connection, between the client ATM and a remote transaction computer, and for rendering such a downloaded advertisement on an interstitial basis while the client is awaiting a response from the transaction computer. While this reference discloses the concept of interstitial advertising, though not in connection with Internet-distributed advertisements, this reference too fails to disclose the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

The WO 99/09486 PCT application (Reference 15) describes a system for distributing messages, such as advertisements, via Internet connections, from remote servers, to client computers. Advertisements are downloaded

and locally cached in each client during waiting periods, such as when a network connection between a server and that client is idle. Subsequently, each client plays its cached advertisements at designated times or interstitially. This reference fails to disclose the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

The WO 97/21183 PCT patent application (Reference 16) describes a methodology, i.e., here being "query-based advertising", for providing Internet-distributed advertising to client computers. The advertisements, here banner ads, are not tied to any particular web page that a user might fetch. Whenever a user, through a browser executing at a corresponding client computer, issues a query (request) to fetch a given web page, an advertisement is retrieved from its associated server and dynamically mixed with content of that page and then returned to the user for display, as a composite page with a particular layout, by the browser. Advertisements can also be interstitially displayed while a page or portion thereof is being downloaded with the advertisement being replaced by that page or portion thereof once its download completes. This reference too fails to disclose the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

The WO 97/07656 PCT patent application (Reference 17 and counterpart to US Patent 5,913,040) describes a system for distributing advertisements over the Internet to client computers and subsequently rendering

those advertisements thereat using a "screen saver" approach, i.e., during client idle times. Here, advertisements are "politely" downloaded, in background, from a remote server whenever usage of a communications link connecting a client to a remote network, e.g., the Internet, is less than a predefined threshold, and then locally stored in the client. A screen saver application, operating in conjunction with an operating system executing in the client computer, detects client idle times and during each such time accesses and displays a locally stored advertisement to a user situated at that computer. This reference contains no disclosure of interstitial display. Moreover and not surprisingly, this reference also fails to disclose the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

The EP 0 903 903 A2 European patent application (Reference 19) describes a system for distributing multi-media advertisements, over Internet connections, from a central server to PC-based kiosks and for interstitially rendering those advertisements through client browsers executing at those kiosks. Advertisements are also rendered while each such kiosk is not otherwise being used. While this reference teaches interstitial display, it fails to disclose the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

The EP 0 818 742 A1 European patent application (Reference 20) describes a technique for visually rendering HTML documents that utilizes embedded (nested or multi-layered) HTML documents, i.e., HTML documents that

themselves contain HTML documents, on JAVA-enabled browsers. This technique relies on rendering, e.g., first and second HTML documents to a common display screen, where the first document contains the second document. HTML data for the first document is parsed and rendered on a first area of a display screen. A second area of the same display screen is reserved to display HTML data for the second document. HTML data for the second document is parsed and rendered on the second area. To accomplish this, the first HTML document contains a JAVA applet tag, which contains a reference to a JAVA HTML parsing and rendering applet that, when executed by the browser: parses and renders HTML data to a screen, reserves the second area, and parses and renders the HTML data for the second document to the second area. This reference contains no disclosure of interstitial display. Moreover and not surprisingly, this reference also fails to disclose the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

Lastly, the Kohda et al publication (Reference 21) describes a methodology for providing advertising over the Internet that relies on use of an agent. Through this methodology, an agent is provided by an "advertising agent company". The agent company maintains a web server that stores advertisements, here being banner ads, and contracts with users who agree to see advertisements while browsing. The agent company is responsible for delivering appropriate advertisements to the client computers (users) and provides browser software to use on each such client. In operation, when each user at his(her) client computer clicks on an anchor (e.g., a link) to fetch a web page, the browser executing thereat contacts the advertising agent company,

the agent (though not executing in the client) then selects and returns an advertisement to the browser which, in turn, merges the advertisement with the content for the desired web page and displays a composite web page on the screen for the user. Inasmuch as the agent is aware of the identity of the user and a page which the user has selected for fetching, the agent can select a specific advertisement tailored to that user and his(her) current interests. This reference also contains no disclosure of interstitial display. Moreover and not surprisingly, this reference also fails to disclose the broad inventive concept of using embedded code or an agent, as described above and claimed in each of the Applicants' three co-pending applications.

As is now quite evident, none of these references contains any teachings whatsoever that teach, disclose or suggest, whether implicitly or explicitly, the inventive concept, as recited in independent claims 2, 36 and 70 in the present application, of embedding code, such as an advertising tag, into content of a referring web page, where, in response to execution of that code in a client computer: the computer "politely" downloads an information object and subsequently renders that object on an interstitial basis, such that the code de-couples the information object from the content of the referring web page.

All the other references that have been uncovered thus far, as listed above, are of much less relevance to the presently claimed invention than those just discussed. Hence, for the sake of brevity, the Applicants see no need to specifically discuss any of these other references and will refrain from doing so.

Thus, the inventive concept, as claimed in the present application, is patentably distinguishable from, and hence neither anticipated by nor obvious over, the teachings in the present art of record.

V. Conclusion

Consequently, the Applicants believe that all their claims in the present application are allowable over all the references now of record and thus are presently in condition for allowance. Accordingly, both expeditious examination of this application and its swift passage to issue are earnestly solicited.

In the event the Examiner believes that any unresolved issues exist in the present application which necessitate adverse action, the Examiner should telephone the undersigned so that appropriate arrangements can be made for resolving these issues as quickly as possible.

The Applicants have now complied with all the relevant provisions for making this application "special" and are willing to co-operate with the US Patent and Trademark Office, to the fullest extent possible, such that this application can be expeditiously prosecuted without undue delay.

VI. Petition Fee

This petition is accompanied by a check in the amount of $ 130.00 to cover the cost of this petition. In the event that this check is unacceptable, insufficient or

is omitted, kindly charge the additional or entire fee, as appropriate, for this paper to my deposit account number 13-3083. To facilitate that charge, a duplicate copy of this letter is enclosed herewith.

Respectfully submitted,

July 10, 2000

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I hereby certify that this correspondence is being deposited on **July 10, 2000** with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231.

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